## ABSTRACT

The present invention relates to a process materials comprising preparing composite 5 electrode active compound of formula  $A_aD_dM_mZ_zO_oN_nF_f$ , such an alkali metal ion, such as a lithium ion, as insertion compound, and an electronically conducting compound, such as carbon, in which a homogeneous mixed precursor containing all the elements A, D, M, Z, O, N 10 and F forming the electrode active compound and also one or more organic and/or organometallic compounds are thermally decomposed, in a short period of time, so as to obtain the composite material.

These composite materials in particular find their application in devices containing said compounds and/or active materials, such as electrochemical devices and batteries, in particular lithium batteries.